

### **Abstract**

#### **Nucleic acid molecule comprising a nucleic acid sequence which codes for a haemocyanin, and comprising at least one intron sequence**

The present invention relates to a nucleic acid molecule comprising a nucleic acid sequence which codes for a haemocyanin, a haemocyanin domain or a fragment thereof with the immunological properties of at least one domain of haemocyanin, and comprising at least one intron sequence.

The invention furthermore relates to constructs which comprise the nucleic acid molecule and, where appropriate, a promoter suitable for expression control. In a preferred embodiment, the construct furthermore comprises a nucleic acid sequence which codes for an antigen. The invention moreover relates to host cells which contain these nucleic acid molecules and/or constructs. The invention furthermore relates to recombinant expression of the nucleic acid molecules and/or constructs in the host cells. The invention furthermore relates to haemocyanin, a haemocyanin domain, a fragment with the immunological properties of at least one domain of haemocyanin and haemocyanin fusion proteins, which are coded by the nucleic acid molecules and/or constructs. The invention furthermore relates to pharmaceutical compositions which comprise the nucleic acid molecules and/or haemocyanin, a haemocyanin domain, a fragment thereof or a fusion protein. The invention furthermore relates to liposomes which comprise the nucleic acid molecules and/or haemocyanin, a haemocyanin domain, a fragment thereof or a fusion protein. The invention furthermore relates to antibodies which are obtainable by immunization of a test animal with haemocyanin, a haemocyanin domain, a fragment thereof or a fusion protein, and the use thereof in screening methods for the identification of tumours.